

APRIL/MAY 2023

**DAM32 — AGRICULTURAL AND
ENVIRONMENTAL MICRO BIOLOGY**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is amensalism?
2. What is humous?
3. What is Leghaemoglobin?
4. Who isolated Azotobacter species?
5. Define epidemiology.
6. Name the pathogen of grassy shoot disease of sugarcane.
7. Define droplet nuclei.
8. Define pathogenicity.
9. Define refuse.
10. Define potable water.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Explain the mutualism with an example.

Or

- (b) Write the physical properties of soil.

12. (a) Describe the method of isolation of VAM fungi.

Or

- (b) Write a note on field application of Azotobacter inoculant and its response.

13. (a) Give an account of symptoms, causal organism and control measures of powdery mildew of cucurbits.

Or

- (b) Write the symptoms, epidemiology and control of root knot of mulberry.

14. (a) Give concise note on freshwater microbial communities.

Or

- (b) Write about the causal organism and symptoms of Diphtheria. Add a note on its control measures.

15. (a) Explain the process of activated sludge system.

Or

- (b) Comment on IMVIC test.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Discuss chemical properties of Soil.

17. Give elaborate account on nitrogen cycle.

18. Describe in detail about the bacterial leaf blight of rice disease.

19. Write an essay on pond ecosystem.

20. Explain about the factors affecting organic matter decomposition.